AMENDMENT

Please amend the application without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

1. (Original) A method of treating motor neuron disease in a patient in need thereof, the method comprising delivering to a target site, a lentiviral vector pseudotyped with a rabies G envelope protein, the lentiviral vector comprising a nucleotide of interest (NOI), wherein the target site is at least part of the central nervous system, and wherein the NOI encodes a gene product that is expressed in the target site, thereby treating motor neuron disease in the patient.

2. (Original) The method of claim 1, wherein treating motor neuron disease comprises halting or delaying the degeneration of motor neurons in the patient.

3. (Original) The method of claim 1, wherein the delivery to the target site of the lentiviral vector comprising the NOI is by diffusion.

4. (Original) The method of claim 1, wherein the delivery to the target site of the lentiviral vector comprising the NOI is via intramuscular or intraparenchymal administration.

5. (Original) The method of claim 1, wherein the delivery to the target site of the lentiviral vector comprising the NOI is via retrograde transport.

6. (Original) The method of claim 1, wherein the motor neuron disease is ALS (Amyotrophic Lateral Sclerosis) or SMA (Spinal Muscular Atrophy).

7. (Original) The method of claim 1, wherein the target site comprises a target cell selected from the group consisting of a sensory neuron, a motor neuron, an astrocyte, an oligodendrocyte, a microglial cell, and an ependymal cell.

8. (Original) The method of claim 1, wherein the NOI encodes a neurotrophic or anti-apoptotic gene product.

9. (Original) The method of claim 1, wherein the NOI encodes a protein selected from the group consisting of SMN-1, GDNF, IGF-1, VEGF, XIAP, NIAP, and bcl-2.

10-31. (Cancelled)

32. (Previously presented) The method of claim 1, wherein the motor neuron disease is stroke.

33. (Previously presented) The method of claim 1, wherein the target site is hippocampal neurons.

34. (Previously presented) The method of claim 1, wherein the lentiviral vector is an equine infectious anemia virus (EIAV) vector.

35. (Previously presented) The method of claim 34, wherein the NOI encodes Bcl-2.

36. (Previously presented) The method of claim 34, wherein the NOI encodes GDNF.

37-44. (Cancelled)

45. (Previously presented) The method of claim 1, wherein the gene product is an interfering RNA.

46. (Previously presented) The method of claim 45, wherein the interfering RNA is a short hairpin RNA.

47-50. (Cancelled)